

REMARKS

The Office Action notes that claims 1-57 are pending in the application. The Office Action rejects claims 1-57 under 35 USC § 103 as being unpatentable over patent no. 6,407,478 to Wood et al. (“the Wood patent”) in view of patent no. 6,655,964 to Fork et al. (“the Fork patent”). The rejection of claims 1-57 over this combination is a new grounds for rejection made in response to arguments submitted by the applicants on June 6, 2005. Those arguments were a traversal of the rejection of the independent claims as being anticipated by Wood. The Applicants again respectfully traverse the Examiner’s rejections.

As the Office Action acknowledges (p. 2), the Wood patent does not disclose “a dielectric tether attached over the common end of the portions of the hot arm member and the free end of the cold arm member [emphasis added]”. The Wood patent discloses a dielectric tether that is attached under beam members 116, 118. Accordingly, Wood does not anticipate independent claims 1, 27, and 52 because it does not disclose all of the features recited therein.

Nevertheless, the Office Action now cites the Fork patent as disclosing “MEMS actuation comprising beams 18 having tethers 14 mounted thereon” and asserts that it would be obvious to mount the tether of the Fork patent on top of the beam members 116, 118 of the Wood patent. The motivation, supplied by the Office Action, for making the combination is “for the purpose of being independent of the substrate”. There are multiple problems with this rejection.

First, the rejection is based on a false premise. The Fork patent does not disclose “MEMS actuation” for the simple reason that the Fork patent does not disclose a MEMS device. The Fork patent discloses an out-of-plane device. The only mention of MEMS in the Fork patent is a passing mention of MEMS varactors which can be used in conjunction with a VCO, with which the invention of Fork can also be used. Put simply, the out of plane devices of Fork can

be used in an overall circuit, which also might utilize MEMS, but the out-of-plane devices of Fork are not MEMS devices, *per se*. Therefore, it is incorrect for the Office Action to state that the Fork patent discloses MEMS actuation that is applicable to the MEMS device of the Wood patent. In actuality, one of ordinary skill in the art would not be motivated to apply the teachings of Fork to the MEMS device of the Wood patent. Accordingly, the motivation for combining the references is insufficient under 35 USC § 103.

Second, even if one were to assume, *arguendo*, that the teachings of the Fork patent are applicable to the Wood patent, the motivation provided by the Office Action is still insufficient because it begs the question as to why one of ordinary skill in the art would move the dielectric tether of the Wood patent from a position under beam members 16, 18 to a position over the beam members 16, 18. The Office Action states that it would be obvious “for the purpose of being independent of the substrate.” This statement, however, is not a motivation; it is merely a restatement of the teaching itself. The Fork patent discloses an out-of-plane device having a tether that is independent of the substrate. The question the Office Action needs to answer is why one of ordinary skill in the art would be motivated to make the tether of the Wood patent “independent” of the substrate. Is there a deficiency in Wood that would make an independent tether desirable? Is there an advantage to an independent tether? The Office Action is silent with respect to motivation, and therefore, assuming, *arguendo*, that the teachings of the Fork patent are even remotely applicable to the Wood patent, the motivation for combining the references is insufficient.

Finally, even if the references were combined, the Office Action has failed to establish that the combination of the Wood patent and the Fork patent discloses all of the limitations of the independent claims. Thus far, the Office Action has not provided a reference that teaches

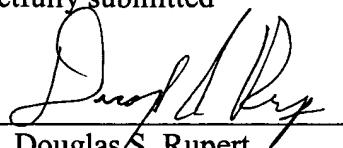
placing a tether over a hot arm member and a cold arm member in a MEMS device, as set forth in the claims. As was discussed earlier, the Fork patent does not disclose a MEMS device. The Fork patent discloses an out-of-plane device. Accordingly, even if the teachings of the references were combined, which is not possible, the combined teachings would not disclose all of the limitations of the independent claims.

In view of the aforesaid, the Applicants respectfully submit that all pending claims are allowable over the Wood and Fork patents. Favorable reconsideration is requested.

Date: 11/7/05

SEYFARTH SHAW LLP
55 East Monroe Street, Suite 4200
Chicago, Illinois 60603
Telephone: (312) 269-8552

Respectfully submitted

By: 

Douglas S. Rupert
Attorney for Applicants
Reg. No. 44,434

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 11/7/05
